

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable

Application Serial Number: Source: Date Processed by STIC:

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS. PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 c-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program emptoying a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST 25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2Kcongoliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO), Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence

Checker Version 3.0 can be down loaded from the USPTO website at the following address: http://www.uspto.gov/web/offices/pac/checker

OIPE

```
pr. 2,4-5
                                                             TIME: 15:05:04
                      PATENT APPLICATION: US/09/709,905
                      Input Set : A:\1906cseq.002
                     Output Set: N:\CRF3\03132001\1709905.raw
       4 <110> APPLICANT: Kalyanaraman Ramnarayan
              Edward T. Maggio
               P. Patrick Hess
       9 <120> TITLE OF INVENTION: Use of Computationally Derived Protein
              Structures of Genetic Polymorphisms in Pharmacogenomics for
              Drug Design and Clinical Applications
     15 <130> FILE REFERENCE: 24737-1906C
 > 17 <140> CURRENT APPLICATION NUMBER: US/09/709,905
      18 <141> CURRENT FILING DATE: 2000-11-10
      20 <150> PRIOR APPLICATION NUMBER: 09/438,566
                                                                                       Does Not Comply
      21 <151> PRIOR FILING DATE: 1999-11-10
      23 <150> PRIOR APPLICATION NUMBER: 24737-1906B
                                                                                 Corrected Diskette Needed
      24 <151> PRIOR FILING DATE: 2000-11-01
      26 <160> NUMBER OF SEQ ID NOS: 118
      28 <170> SOFTWARE: FastSEQ for Windows Version 4.0
     30 <210> SEQ ID NO: 1
     31 <211> LENGTH: 6
     32 <212> TYPE: PRT
     33 <213> ORGANISM: Artificial Sequence
     35 <220> FEATURE:
     36 <223> OTHER INFORMATION: Modified Hepatitis C Virus NS3 Protease Inhibitor
             Peptide
     40 <221> NAME/KEY: ACETYLATION
     41 <222> LOCATION: 1
     43 <221> NAME/KEY: MOD_RES
     44 <222> LOCATION: 2
     45 <223> OTHER INFORMATION: D-glutamic acid
     47 <221> NAME/KEY: MOD_RES
     48 <222> LOCATION: 5
     49 <223> OTHER INFORMATION: beta-cyclohexylalanine
     51 <300> PUBLICATION INFORMATION:
52 <301> AUTHORS: Ingallinella, P., Altamura, S., Bianchi, E., Talia
     53 <302> TITLE: Potent Peptide Inhibitors Of Human Hepatitis C Vir
     54 <303> JOURNAL: Biochemistry
     55 <304> VOLUME: 37
     56 <305> ISSUE: 25
     57 <306> PAGES: 8906-8914
     58 <307> DATE: 1998-06-23
     60 <400> SEQUENCE: 1 /
61 Asp Xaa Leu Ile Xaa Cys
     62 1
                         5 -
     64 <210> SEQ ID NO: 2
     65 <211> LENGTH: 6
     66 <212> TYPE: PRT
     67 <213> ORGANISM: Artificial Sequence
     69 <220> FEATURE:
     70 <223> OTHER INFORMATION: Modified Hepatitis C Virus NS3 Protease Inhibitor
```

DATE: 03/13/2001

RAW SEQUENCE LISTING

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/709,905

DATE: 03/13/2001 TIME: 15:05:04

Input Set : A:\1906cseq.002

Output Set: N:\CRF3\03132001\1709905.raw

```
Peptide
        75 <221> NAME/KEY: ACETYLATION
        76 <222> LOCATION: 1
        78 <221> NAME/KEY: MOD_RES
        79 <222> LOCATION: 5
        80 <223> OTHER INFORMATION: beta-cyclohexylalanine
        82 <300> PUBLICATION INFORMATION:
        83 <301> AUTHORs: Ingallinella, P., Altamura, S., Bianchi, E., Talia
        84 <302> TITLE: Potent Peptide Inhibitors Of Human Hepatitis C Vir
        85 <303> JOURNAL: Biochemistry
        86 <304> VOLUME: 37
        87 <305> ISSUE: 25
        88 <306> PAGES: 8906-8914
       89 <307> DATE: 1998-06-23
91 <400> SEQUENCE: 2
92 Asp Glu Leu Ile Xaa Cys
93 1 5
       95 <210> SEO ID NO: 3
96 <211> LENGTH: 1045
97 <212> TYPE: DNA
98 <213> ORGANISM: Human Immunodificiency Virus (HIV)
100 <220> FEATURE:
101 <221> NAME/KEY: CDS (1) & Cording begins at furt base (global enco)
102 <222> LOCATION: (0) ... (297)
98 <213> ORGANISM: HUMAN INMIDIOCENTICAL
100 <220> FEATURE:
101 <221> NAME/KEY: CDS (1)
W--> 102 <222> LOCATION: (0) ...(297)
103 <223> OTHER INFORMATION: Protease
105 <221> NAME/KEY: CDS
105 <221> NAME/KEY: CDS
105 <221> NAME/KEY: (205)
> 106 <222> LOCATION: (298)...(1045)
107 <223> OTHER INFORMATION: Portion of Reverse Transcriptase
        109 <400> SEQUENCE: 3
        110 cct cag atc act ctt tgg caa cga ccc cty gtc aca ata aag ata ggg
                                                                                                                       48
    111 Pro Gln Ile Thr Leu Trp Gln Arg Pro Xaa Val Thr Ile Lys Ile Gly 112 1 5 10 15
   114 ggc caa cta aaa gaa gct yta tta gat aca gga gca gat gat aca gta
115 Gly Gln Leu Lys Glu Ala Xaa Leu Asp Thr Gly Ala Asp Asp Thr Val
116 20 25 30
                                                                                                                       96
        118 tta gaa gaa atg agt tta cca ggg aaa tgg aaa cca aaa atg ata ggg
119 Leu Glu Glu Met Ser Leu Pro Gly Lys Trp Lys Pro Lys Met Ile Gly
                                                                                                                     144
             35
                                                    40
       45
                                                                                                                     192
       126 gaa atc tgt gga cat aaa gct ata ggc aca gta tta gta gga cct aca
127 Glu Ile Cys Gly His Lys Ala Ile Gly Thr Val Leu Val Gly Pro Thr
128 65 70 75 80
                                                                                                                     240
       130 cct gtc aac ata att gga aga aat ttg ttg act cag att ggt tgc act 131 Pro Val Asn Ile Ile Gly Arg Asn Leu Leu Thr Gln Ile Gly Cys Thr 132 \phantom{\bigg|} 85 \phantom{\bigg|} 90 \phantom{\bigg|} 95
                                                                                                                     288
        134 tta aat ttg ccc att agt cct att gaa act gta cca gta aaa tta aag
                                                                                                                     336
        135 Leu Asn Leu Pro Ile Ser Pro Ile Glu Thr Val Pro Val Lys Leu Lys
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/709,905 DATE: 03/13/2001 TIME: 15:05:04

Input Set : A:\1906cseq.002
Output Set: N:\CRF3\03132001\1709905.raw

	136				100					105					110			
						ggc												384
		Pro	Gly		Asp	Gly	Pro	Lys		Lys	Gln	Trp	Pro		Thr	Glu	Glu	
	140			115					1.20					125				
						tta												432
		Lys		Lys	Ala	Leu	Val		Ile	Cys	Thr	Glu		Glu	Lys	Glu	GIA	
	144		130					135					140					
						att												480
		-	He	Ser	Lys	rle	-	Pro	Glu	Asn	Pro	_	Asn	Thr	Pro	11e		
	148						150					155					160	
		-		_		aaa	-	_								-		528
		Ala	11e	Lys	Lys	Lys	Asp	ser	Tur	ьys	_	arg	Lys	Leu	vaı		Pne	
	152					165					170	h				.175		576
		_	_			aag	_			-				**				576
		Arg	GIR	Leu		Lys	Arg	THE	GIII		PHE	тгр	GIU	val		ren	GTÀ	
	156	1			180					185	200	222	+	a+ -	190	24.5	at a	624
						gca												024
		116	Pro		PLO	Ala	GTÄ	Leu	200	CTII	rys	гÃЗ	ser	205	THE	116	neu	
	160	~~ +	~+~	195	ant.		+ = +	+++		att	000	tta	mat		000	tte	agg	672
						gca Ala												072
	164	АБР	210	GLY	аэр	ATG	1 y 1	215	Ser	VUI	FLO	neu	220	GIU	Gry	i nc	my	
		224		agt	ac a	ttt	200		aat	agt	ana	aat		gag	aca	cca	aaa	720
					-	Phe					-							,20
	168		171	1111	nia	THE	230	110	110	DCI	9	235	11011	04.0		120	240	
			ana	tat	can	tac		ata	ctc	cca	caq		taa	aaa	aga	tea		768
						Tyr												
	172	110	3	-] -	0 4,11	245			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		250	1		-1-	1	255		
-1/		qca	ata	ttt	caa	agt.	aqc	atq	aça	aqa	aty	tta	qaq	cct	ttt	aga	aaa	816
WIL						ser												
O.	176				260					265					270			
	178	caa	aat	cca	gaa	ata	gtt	atc	tat	caa	tac	atg	gat	gat	ttg	tat	gta	864
	179	Gln	Asn	Pro	Glu	Ile	Val	Ile	Tyr	Gln	Tyr	Met	Asp	Asp	Leu	Tyr	Val	
	180			275					280					285				
						gaa												912
	183	Gly	Ser	Asp	Leu	Glu	Ile	Gly	Gln	His	Arg	Ala	Lys	Ile	Glu	Glu	Leu	
	184		290					295					300					
	186	aga	gga	cat	cta	tta	aag	t.gg	gga	ttt	acc	aca	cca	gac	aaa	aaa	cat	960
	187	Arg	Gly	His	Leu	Leu	Lys	${\tt Trp}$	Gly	Phe	Thr	Thr	Pro	Asp	Lys	Lys		
	188						310					315					320	
						cca												1008
		Gln	Lys	Glu	Pro	Pro	Phe	Leu	Trp	Met		Tyr	Glu	Leu	His		Asp	
	192					325					330					335		
						cag								g				1045
		Lys	Trp	Thr		Gln	Pro	He	Lys		Pro	Glu	Lys					
	196				340					345								
		<210		-														
		<211				146												
	201	<212	?> TY	PE:	DNA													

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/709,905

DATE: 03/13/2001 TIME: 15:05:04

96

144

192

288

384

480

528

576

624

672

	Input Set : A:\1906cseq.002 Output Set: N:\CRF3\03132001\1709905.raw																
W>	204 205 206 207	<213> ORGANISM: Human Immunodifficiency Virus (HIV) <220> FEATURE: <221> NAME/KEY: CDS (1) <222> LOCATION: (0)(297) <223> OTHER INFORMATION: HIV Protease <221> NAME/KEY: CDS															
Ø€	<pre>-210 <222> LOCATION: (298)(1046) 211 <223> OTHER INFORMATION: Portion of HIV Reve 213 <400> SEQUENCE: 4 214 cct cag atc act ctt tgg caa cga ccc ctt gtc</pre>																
	215 216	Pro 1	Gln	Ile	Thr	Leu 5	Trp	Gln	Arg	Pro	Leu 10	Val	Thr	Ile gat	Lys	11e 15	Gly
	219 220	Gly	Gln	Leu	Lys 20	Glu	Ala	Leu	Leu	Asp 25	Thr	Gly	Ala	Asp	Asp 30	Thr	Val
	223 224	Val	Glu	Glu 35	Met	Asn	Leu	Pro	Gly 40	Lys	Trp	Lys	Pro	Lys 45 caa	Met	Ile	Gly
√	228		50					55					60	Gln gta			
(WE=>	232	65		•	-		70			_		75		Val att	-		80
	236 238	tta	aat	ttt	ccc	85 att	agt	cct	att	gaa	90 act	gta	cca	Ile gta	aaa	95 tta	aag
	240 242	cca	gga	atg	100 gat	ggc	cca	aaa	gtt	105 aaa	caa	tgg	cca	Val ttg	110 aca	gaa	gaa
	244 246	aaa	ata	115 aaa	gca	tta	gt.a	gaa	120 atc	tgt	aca	gaa	t.t.g	Leu 125 gaa	aag	gaa	9 99
	248	-	130	•				135		-			140	Glu	_		_

250 aaa att tca aaa att ggg cct gaa aat cca tac aat act cca gta ttt 251 Lys Ile Ser Lys Ile Gly Pro Glu Asn Pro Tyr Asn Thr Pro Val Phe 252 145 150 150 160

254 gcc ata aag aaa aag aac agt act aaa tgg aga aaa tta gta gat ttc

255 Ala Ile Lys Lys Lys Asn Ser Thr Lys Trp Arg Lys Leu Val Asp Phe 256 \$165\$ 170 175

258 aga gaa ctt aat aag aga act caa gac ttc tgg gag gtt caa tta gga. 259 Arg Glu Leu Asn Lys Arg Thr Gln Asp Phe Trp Glu Val Gln Leu Gly 260 180 185 190 262 ata cca cat cca gca ggg tta aaa aag aat aaa tca ata aca gta ctg

263 Ile Pro His Pro Ala Gly Leu Lys Lys Asn Lys Ser Ile Thr Val Leu 264 195 200 205 266 gat gtg ggt gat gca tat ttt tca gtt ccc tta tgt gaa gac ttc agg

```
RAW SEQUENCE LISTING
                                                            DATE: 03/13/2001
                    PATENT APPLICATION: US/09/709,905
                                                            TIME: 15:05:04
                    Input Set : A:\1906cseq.002
                    Output Set: N:\CRF3\03132001\1709905.raw
     267 Asp Val Gly Asp Ala Tyr Phe Ser Val Pro Leu Cys Glu Asp Phe Arg
                                                   220
     268 210 215
     270 aag tat act gea ttt ace ata eet agt gta aac aat gag act eea ggg
                                                                             720
     271 Lys Tyr Thr Ala Phe Thr Ile Pro Ser Val Asn Asn Glu Thr Pro Gly
                    230
                                             235
     272 225
                                                                             768
     274 att aga tat cag tac aat gtg ett eea cag gga tgg aaa gga tte ace
     275 Ile Arg Tyr Gln Tyr Asn Val Leu Pro Gln Gly Trp Lys Gly Phe Thr
                        245
                                            250
     278 ago ata tto caa tgt ago atg aca aaa ato tta gag oot ttt aga aaa
                                                                             816
     279 Ser Ile Phe Gln Cys Ser Met Thr Lys Ile Leu Glu Pro Phe Arg Lys
                  260
                                       265
     282 caa aat cca gag ata gtt atc tat caa tac atg gat gat ttg tat gta
                                                                             864
     283 Gln Asn Pro Glu Ile Val Ile Tyr Gln Tyr Met Asp Asp Leu Tyr Val
     284 275
                                  280
                                                       285
     286 gga tot gao tta gaa ata ggg cag cat aga gca aaa ata gag gaa otg
                                                                             912
     287 Gly Ser Asp Leu Glu Ile Gly Gln His Arg Ala Lys Ile Glu Glu Leu
                               295
                                                    300
     288
          290
     290 aga caa tat ctg tgg aag tgg gga ttt tgc aca cca gaa caa aar cat
                                                                             960
     291 Arg Gln Tyr Leu Trp Lys Trp Gly Phe Cys Thr Pro Glu Gln Lys His
292 305 310 315 320
     294 cag aaa gaa cct cct tto ctt tgg atg ggt tat gaa ctc cat ecc gat
                                                                            1008
     295 Gln Lys Glu Pro Pro Phe Leu Trp Met Gly Tyr Glu Leu His Pro Asp
                       325
                                           330
     298 aaa tgg aca gta caa cct ata gtg ctg cca gac aaa ga
                                                                            1046
     299 Lys Trp Thr Val Gln Pro Ile Val Leu Pro Asp Lys
                   340
                                        345
     303 <210> SEQ ID NO: 5
     304 <211> LENGTH: 1104
     305 <212> TYPE: DNA
     306 <213> ORGANISM: Human Immunodificiency Virus (HIV)
     308 <220> FEATURE:
309 <221> NAME/KEY: CDS (1)
W--> 310 <222> LOCATION: (0)...(297)
311 <223> OTHER INFORMATION: HIV Protease
     313 <221> NAME/KEY: CDS
314 <222> LOCATION: (298)...(1104)
     315 <223> OTHER INFORMATION: Portion of HIV Reverse Transcriptase
     317 <400> SEQUENCE: 5
    ,318 cct cag atc act ctt tgg caa cga ccc atc gtc aca ata aag rta ggg
                                                                              48
W Pro Gln Ile Thr Leu Trp Gln Arg Pro Ile Val Thr Ile Lys Xaa Gly
                        5
                                             10
     322 ggg caa cta agg gaa gct cta tta gat aca gga gca gat gat aca ata
     323 Gly Gln Leu Arg Glu Ala Leu Leu Asp Thr Gly Ala Asp Asp Thr Ile
                 20
                             25
     326 ata gaa gac ata act ttg cca gga aga tgg aca cca aaa atg ata ggg
                                                                             144
     327 Ile Glu Asp Ile Thr Leu Pro Gly Arg Trp Thr Pro Lys Met Ile Gly
     328 35 40
     330 gga att gga ggt ttt gtc aaa gta aga cag tat gat cag ata ccc ata
                                                                             192
    331 Gly Ile Gly Gly Phe Val Lys Val Arg Gln Tyr Asp Gln Ile Pro Ile
```

The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

FYI:

Please Note:

Use f n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least ne n or Xaa.

VERIFICATION SUMMARY DATE: 03/13/2001
PATENT APPLICATION: US/09/709,905 TIME: 15:05:05

Input Set : A:\1906cseq.002

Output Set: N:\CRF3\03132001\1709905.raw

```
L:17 M:270 C: Current Application Number differs, Replaced Current Application Number
L:61 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:92 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:102 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:3, CDS LOCATION: (0)...(297)
L:111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:115 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:175 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:206 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:4, CDS LOCATION: (0)...(297)
L:231 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:310 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:5, CDS LOCATION: (0)...(297)
L:319 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:335 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:351 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:418 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:6, CDS LOCATION: (0)...(297)
L:530 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:7, CDS LOCATION: (0)...(297)
L:546 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:547 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:555 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:642 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:8, CDS LOCATION: (0)...(297)
L:651 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:655 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:754 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:9, CDS LOCATION: (0)...(297)
L\!:\!763 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:783 \text{ M}:341 \text{ W}: \text{ (46) "n" or "Xaa" used, for SEQ ID#:9}
L:835 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:843 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:866 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:10, CDS LOCATION: (0)...(297)
L:879\ M:341\ W:\ (46) "n" or "Xaa" used, for SEQ ID#:10
L:883 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:935 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:943 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:978 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:11, CDS LOCATION: (0)...(297)
L:987 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:991 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:1011 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:1059 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:1090 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:12, CDS LOCATION: (0)...(297)
L:1171 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1202 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:13, CDS LOCATION: (0)...(297)
L:1211 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:1215 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:1259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:1279 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:1314 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:14, CDS LOCATION: (0)...(297)
L:1387 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 L:1395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:1399 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:1426 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:15, CDS LOCATION: (0)...(297)
```

 VERIFICATION SUMMARY
 DATE: 03/13/2001

 PATENT APPLICATION: US/09/709,905
 TIME: 15:05:05

Input Set : A:\1906cseq.002

Output Set: N:\CRF3\03132001\1709905.raw

```
L:1443 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 L:1447 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:1499 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:1515 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:1523 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:1538 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:16, CDS LOCATION: (0)...(297)
L:1579 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 L:1619 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:1650 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:17, CDS LOCATION: (0)...(297)
L:1659 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1671 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1715 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1719 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1735 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1739 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1750 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1762 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:18, CDS LOCATION: (0)...(297)
L:1783 M:341 W: (46) "n" or "xaa" used, for SEQ ID#:18
L:1819 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:1874 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:19, CDS LOCATION: (0)...(297)
L:1986 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:20, CDS LOCATION: (0)...(297)
L:2098 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:21, CDS LOCATION: (0)...(297)
L:2210 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:22, CDS LOCATION: (0)...(297) L:2322 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:23, CDS LOCATION: (0)...(297)
L:2434 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:24, CDS LOCATION: (0)...(297)
L:2546 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:25, CDS LOCATION: (0)...(297)
L:2658 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:26, CDS LOCATION: (0)...(297)
L:2770 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:27, CDS LOCATION: (0)...(297)
L:2774 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ 1D#:27, CDS LOCATION: (298)...(1116)
L:2882 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:28, CDS LOCATION: (0)...(297) L:2994 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:29, CDS LOCATION: (0)...(297)
L:3106 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:30, CDS LOCATION: (0)...(297)
L:3218 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:31, CDS LOCATION: (0)...(297)
L:3330 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:32, CDS LOCATION: (0)...(297)
L:3442 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:33, CDS LOCATION: (0)...(297)
L:3554 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:34, CDS LOCATION: (0)...(297)
L:3666 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:35, CDS LOCATION: (0)...(297)
L:3778 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:36, CDS LOCATION: (0)...(297)
L:3890 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:37, CDS LOCATION: (0)...(297)
L:4002 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEO ID#:38, CDS LOCATION: (0)...(297)
L:4114 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:39, CDS LOCATION: (0)...(297)
L:4226 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:40, CDS LOCATION: (0)...(297)
L:4338 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:41, CDS LOCATION: (0)...(297)
L:4446 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEO ID#:42, CDS LOCATION: (0)...(297)
L:4550 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:43, CDS LOCATION: (0)...(297)
L:4658 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:44, CDS LOCATION: (0)...(297)
L:4770 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:45, CDS LOCATION: (0)...(297)
L:4882 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:46, CDS LOCATION: (0)...(297)
L:4994 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:47, CDS LOCATION: (0)...(297)
```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/709,905

DATE: 03/13/2001 TIME: 15:05:05

Input Set : A:\1906cseq.002

Output Set: N:\CRF3\03132001\1709905.raw

L:5106 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ 1D#:48, CDS LOCATION: (0)...(297)
L:5218 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ 1D#:49, CDS LOCATION: (0)...(297)
L:5330 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ 1D#:50, CDS LOCATION: (0)...(297)
L:5442 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ 1D#:51, CDS LOCATION: (0)...(297)